

TECHNICAL SUMMARY AND EXECUTIVE DIRECTOR'S PRELIMINARY DECISION

Description of Application

- Applicant:** Waste Control Specialists LLC (WCS)
Radioactive Material License (RML) No.: R04100
Customer Number: CN600616890
Regulated Entity Number: RN101702439
- Action:** Proposed Minor Amendment of RML No. R04100 for low-level radioactive waste (LLRW) disposal and storage and processing of radioactive waste.
- Location:** WCS is located at 9998 State Highway 176 West, Andrews, Andrews County, Texas 79714, near the Texas-New Mexico state line.
- General:** WCS currently holds a radioactive material license (RML No. R04100) for a LLRW land disposal facility and for a radioactive waste storage and processing facility.
- Request:** WCS submitted a minor amendment application to the TCEQ on October 24, 2016 to clarify, update and provide corrections to several license conditions, remove Attachment D, to authorize certain drainage system design and durability improvements, change the date of the month when the monthly site receipt and disposal activities report is due, extend the possession time of the Los Alamos National Laboratory (LANL) waste by two years, include the Federal Waste Disposal Facility (FWF) into the Waste Acceptance Criteria (WAC) and add authorization to build the Rail Tipper Building (RTB) for receiving and unloading bulk Class A waste with the provision that the licensee cannot begin operations of this facility until the Executive Director has approved the operational procedures. A response to questions and supplement to the amendment application (supplement) was received on February 13, 2017 to change the due date for the performance assessment update from June 30 of each year to each year, remove the five visitor limit that may be escorted by a single trained WCS staff member, replace the table listing the required frequency of surveys with a reference to procedures RSP-100 and RS-3.2.4 which also have these frequency requirements, reduce the inspection frequency of the CPC compactor from daily to prior to use, change the focus of the sum of fractions rules and its point of compliance to the container level rather than the waste profile level for the license condition authorizing WCS to exempt low activity waste for disposal in its Resource Conservation and Recovery Act (RCRA) disposal facility, and change the notification frequency for tier I and II low activity waste exempted for disposal in the RCRA disposal facility from each shipment to a quarterly basis. A

replacement, dated May 26, 2017, to the February 13, 2017 supplement was received which contained the same license amendment request as the February 13, 2017 supplement. An application, dated July 25, 2017, was received that completely replaced the October 24, 2016 application, the February 13, 2017 supplement and the May 26, 2017 supplement and which contains the same information and amendment requests, as well as the correspondences concerning the prior submissions, found in the replaced documents. An email dated August 15, 2017 was received which requested a modification to license condition 119. This amendment also includes modifications to some of the license conditions due to decision by the Executive Director to remove some license conditions since they were obsolete, added that the licensee should retain records for inspection as required by the provisions of 30 Texas Administrative Code (TAC) Chapter 336, require the licensee to submit a quarterly summary of fee payments paid to the state, added chewing to the list of prohibited activities in the area where radioactive material is handled, transferred, processed or disposed, add a requirement for the licensee to notify the agency as soon as practicable upon knowledge of a possible exceedance of an action or analytical decision level, and to allow a "qualified TCEQ staff" to inspect waste shipments and manifests.

Authority: A TCEQ radioactive material license for the receipt and disposal of LLRW and for the storage and processing of radioactive waste is required by Chapter 401 of the Texas Health and Safety Code. An amended license has been prepared in accordance with the applicable requirements of Title 30, Texas Administrative Code (TAC) Chapters 281, 305 and 336.

Administrative Information

At the time of this review, WCS did not have any delinquent fees.

The regulated entity, WCS, has a compliance history classification of satisfactory, with a rating of 0.65.

The WCS site has a compliance history classification of satisfactory, with a rating of 0.65.

Technical Information:

This license amendment has been reviewed in accordance with applicable rules and statutes, including 30 TAC Chapter 336 (Radioactive Substance Rule) and Chapter 401 of the Texas Health and Safety Code. Review of the requests included an assessment of the radiological and non-radiological effects of the license changes on the public health and safety.

- License Condition (LC) 8.H was modified to add encapsulation as one of the authorized uses for sealed sources. WCS is already authorized in the license to

perform encapsulation so this is not a new authorized use but this modification clarifies this authorization.

- LC 8.I was modified to change “stabilized dry active waste” to “stable waste” since the two terms are equivalent. The term “stable waste” is defined and used in the license elsewhere whereas the term “stabilized dry active waste” is no longer used in the license.
- LC 13 was modified by decision of the executive director to add the requirement that the licensee shall maintain records of the inspections, surveys, personnel and equipment monitoring, program audits and other records required by the provisions of 30 TAC Chapter 336 and this license for inspection by the executive director.
- LC 22 was modified by decision of the executive director to require the licensee to submit a quarterly summary of fee payments paid to the state to formalize as a license requirement a report that the licensee has previously submitted voluntarily.
- LC 50 was modified to change “other objects” to debris that must be removed that impede the storm sewer system from draining as designed (which replaced “and keep the storm sewer system free from debris”), and to require that maintenance records be available for inspection for a period of two years. The purpose of the modification was to limit unnecessary wear and tear on the storm sewer system structures, and to clarify that records be maintained for inspection.
- LC 51 was modified to change “sediment, standing water, and other objects” to “sediment and debris” that must be removed that impede the drainage ditches (which replaced “and keep the ditches free from debris”) surrounding the facilities from draining as designed, and to require that maintenance records be available for inspection for a period of two years. The purpose of the modification was to limit unnecessary wear and tear on the ditch liners, and to clarify that records be maintained for inspection.
- LC 60.A was modified for clarification to add that Part A refers to diversion ditches around the perimeter of the cell and that it is to be designed to account for the 100-year, 24-hour design storm requirement.
- LC 60.B was modified for clarification so that the ledge ditch design must also account for one (1) foot of freeboard. Another modification was to add that where ledge ditches are hydraulically connected to an unlined gravel subsurface drain, sump, and automated pumping system, the freeboard requirement may be waived if the pumping rate is greater than the rate required to maintain ditch water levels below the overflow outlet during the 100-year event. The purpose of this modification is to improve dewatering performance and protect the integrity of the ledges which provide a working surface for vehicles.
- LC 73.C was modified to add gravel subsurface drains with sumps and automated pumping systems as an option for draining catch basins on the bench of the disposal unit. The purpose of the modification was to improve dewatering performance and protect the integrity of the ledges which provide a working surface for vehicles.
- LC 89 was modified by removing the due date of June 30 as the specific date for when the licensee is required to submit the annual update to the performance assessment to allow for flexibility in reporting and model development.

- LC 95 and 139 were modified to clarify that the WAC applies to both the Compact Waste Facility (CWF) and the FWF.
- LC 96 was modified to change the due date for the monthly site receipt and disposal activities report from the seventh day of the month to the tenth day since WCS performs a multiple person review of this report before sending it to TCEQ.
- LC 99 was modified by changing the frequency of the updated stored inventory report from quarterly to “upon written request” since the licensee already voluntarily submits this report monthly so it would be redundant to also submit a quarterly report in addition to the monthly report.
- LC 112 was modified to change the Consolidated Emergency Response Plan (CERP) from the one approved in a letter from the TCEQ dated July 9, 2013 to the latest version that has been approved by the executive director since a CERP has been approved after July 9, 2013. This change will result in the license not needing to be amended for changes in the CERP. Any changes in the CERP need to be approved by the executive director.
- LC 119 was modified so that entering a contamination area, instead of entering a restricted area, requires a whole body count annually and for-cause since contamination areas are where an individual is more likely to pick up internal contamination and not all restricted areas at the site have contamination areas.
- LC 121.A was modified by removing the requirement that a maximum of five visitors may be escorted by a single trained person on the site to allow the licensee to determine, on a case by case basis, the appropriate number of visitors.
- LC 126 was modified by decision of the executive director to add chewing to the list of activities not allowed within the restricted area or in any area where radioactive material is handled, transferred or processed and to add disposed to the list of “where radioactive material is handled, transferred or processed”.
- LC 128 was modified to remove the table of contamination survey frequencies and replace it with the frequency stipulated in procedures RSP-100 and RS-3.2.4. These procedures have the same frequency as in the table and any changes in the procedures need to be approved by the executive director.
- LC 131 was modified by decision of the executive director to add that the licensee shall maintain personnel entry records, personnel exit records, and contamination logs for executive director review.
- LC 132 was moved by decision of the executive director to be part of LC 121.E.
- LC 140 was modified by replacing “encapsulated, grouted, and classified by” with “packaged and characterized using” to be consistent with the Nuclear Regulatory Commission’s (NRC) Concentration Averaging and Encapsulation Branch Technical Position (BTP) language.
- LC 144 was modified by the executive director to remove subconditions B, C, D, E, F, and G related to submission of wastewater treatment plant equipment details, procedures, drawings, contractor’s operational startup report, and verification of spill containment capacity. The licensee submitted the information required to satisfy these conditions. LC 144.A, which requires the licensee to provide details of any agreement for offsite wastewater disposal, was moved to LC 144.
- LC 158.A.3.a-e were changed to LC 158.A.3.b-f and a new LC 158.A.3.a was added by decision of the Executive Director which requires the licensee to notify the

agency as soon as practicable upon knowledge of a possible exceedance of an analytical decision level.

- LC 158.A.4.a-f were changed to LC 158.A.4.b-g and a new LC 158.A.4.a was added by decision of the Executive Director which requires the licensee to notify the agency as soon as practicable upon knowledge of a possible exceedance of an action level.
- LC 158.H(10) was modified to change the environmental monitoring report from semi-annual to annual to correct an error since the license was amended to change this frequency in an previous amendment.
- LC 188 was modified to update the reference to additional requirements for storage and processing facilities from LC 192 to LC 207.B. LC 188.C(3) was modified by changing the frequency of inspecting the CPC compactor from daily to “prior to use” since the CPC compactor is not used regularly.
- A new license sub-condition, 188.K, was added to authorize receipt and transfer of bulk radioactive waste by rail at the RTB as described in the amendment application dated July 25, 2017 to include unloading bulk Class A radioactive waste, washing and decontamination of bulk radioactive waste conveyances, solidification and storage of aqueous liquids and semi-solids incidental to unloading and cleaning of railcars, and transfer of the bulk radioactive waste from the train to a truck for delivery to the respective WCS facility. The licensee shall not commence RTB operations until the licensee has submitted, and the executive director has approved, a rail tipper operations procedure invoking applicable radiation safety procedures.
- LC 192(B)(1) was modified to authorize the licensee to determine the exemption tier per container using the concentration value of that container instead of per waste profile using the average and maximum concentration values of the total waste shipment. The classification of the tier level was changed from prior to receipt to prior to disposal. LC 192.B(5) was modified to change the notification requirement of each tier 1 and 2 waste shipment that is disposed to a quarterly report.
- A new license sub-condition, 203.K, was added to allow WCS to construct the RTB for receipt of bulk Class A radioactive waste by rail and transfer to a truck for delivery to the respective WCS facility as described in the application dated July 25, 2017. The licensee shall not operate the RTB for receipt of waste until the executive director has reviewed and approved the sealed WCS RTB engineering documents and calculations requested by TCEQ.
- LC 206.A(8)(b)(iv) has been modified to reflect the changes by the NRC on the Order to WCS regarding possession and storage of special nuclear material. The time that the licensee is allowed to possess the LANL waste has been changed from a maximum of 2 years to 4 years with the date changed from December 23, 2016 to December 23, 2018.
- LC 207.A was modified to add as a tie-down the amendment application dated July 25, 2017.
- LC 207.E was removed because the errors in 30 TAC §336.357 have been corrected by rulemaking and consequently this license condition is no longer needed.

- Attachment C was modified to clarify that the WAC applies to both the CWF and the FWF. The definitions of Compact Waste and LLRW were removed since these terms are already defined in LC 11.
- Attachment C, section 10.6, was modified to add the 3-60B cask as one of the casks excepted from the void space requirement.
- Sections 1 and 13 of Attachment C was modified by decision of the executive director to add that a “qualified TCEQ staff”, as well as the TCEQ Resident Inspector, may inspect every waste shipment and manifest received at the disposal facility and that the TCEQ Resident Inspector or other qualified TCEQ staff may inspect certain waste shipment and manifest received at the FWF as deemed necessary by the TCEQ Resident Inspector or other qualified TCEQ staff.
- Attachment D, Requirements Pertaining to the Pavement Design, was removed from the license since it is obsolete due to the replacement of the bituminous asphalt pavement with a caliche surface in Amendment 14 and the addition of caliche maintenance requirements in license conditions 27.A and 27.B in Amendment 18.

Preliminary Decision and Recommendation

The executive director has made a preliminary decision that the proposed license amendment, if issued, will meet all statutory and regulatory requirements.